WHAT IS CLAIMED IS:-

1. A method of dynamic medical imaging a subject comprising the steps of:-

obtaining a plurality of time separated images of the subject;

registering the plurality of time separated images together to match corresponding locations in the images to each other;

measuring from the registered images the temporal behaviour of an imaged region at a location in the subject; and

comparing the measured temporal behaviour with a model of the expected temporal behaviour of the imaged region to determine the level of agreement therebetween as a measure of the quality of the registration of the time separated images.

2. A method according to claim 1 wherein obtaining the images involves the use of an imaging agent and said model is a model of the temporal behaviour of the imaging agent.

3. A method according to claim 2 wherein the imaging agent is a contrast agent.

4. A method according to claim 1 wherein the level of agreement between the measured temporal behaviour and the expected temporal behaviour is displayed.

5. A method according to claim 4 wherein the level of agreement is displayed overlying an image of the subject.

6. A method according to claim 1 further comprising re-executing the step of registering the plurality of time separated images together in imaged regions where the level of agreement is poor.

7. A method according to claim 6 wherein the registration uses a parameterised process and is re-executed using different registration parameters.

8. A method according to claim 6 wherein the registration is re-executed at a different resolution.

9. A method according to claim 6 wherein the registration is re-executed at a different scale.

10. A method according to claim 6 wherein the registration comprises searching through a search window defined in one of the images and the registration is re-executed using a different sized search window.

11. A method according to claim 1 wherein the model is a temporal model of the take-up and wash-out of an imaging agent administered to the subject.

12. A method according to claim 1 wherein the subject is a living human, animal or plant.

13. A method according to claim 1 wherein the images are acquired by one of magnetic resonance imaging, computed tomography, positron emission tomography, single photon emission computed tomography, nuclear medicine, ultrasound, x-ray and optical imaging.

14. A computer program comprising program code means for executing the steps in claim 1 of registering the plurality of time separated images together to match corresponding locations in the images to each other; measuring from the registered

images the temporal behaviour at a location in the subject; and comparing the measured temporal behaviour to a model of the expected temporal behaviour to determine the level of agreement therebetween as a measure of the quality of the registration of the time separated images.

15. A computer readable storage medium carrying a computer program according to claim 14.

16. Dynamic medical image processing apparatus adapted to execute the steps in claim 1 of registering the plurality of time separated images together to match corresponding locations in the images to each other; measuring from the registered images the temporal behaviour of the imaging agent at a location in the subject; and comparing the measured temporal behaviour of the imaging agent to a model of the expected temporal behaviour to determine the level of agreement therebetween as a measure of the quality of the registration of the time separated images.